vacuoles is a new factor which, though small, is quite definite.

Full details about these experiments will be given elsewhere.

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Structural Analogies of Pox Viruses and Bacteria

Dawson and McFarlane[1] reported that the pepsin-digested elementary body of vaccinia reveals a nucleus-like central body surrounded by a membrane. This phenomenon was confirmed by subsequent papers for vaccinia[2,3] and other viruses of the pox group—fowl pox[3,4], neurovaccinia[3], ectromelia[3] and myxoma[3,5]. Pepsin digestion does not interfere with the deoxyribonucleic acid content of the virus, as shown by an earlier report[6]. In analogy to cells of higher organisms and bacteria, the structure containing deoxyribonucleic acid had to be looked for in the central body. Therefore, we attempted to digest specifically the central body by pure enzymes, as we did with the nuclei of rod-shaped and coccoid bacteria (*Escherichia coli*[7] and *Neisseria sicca*[8]).

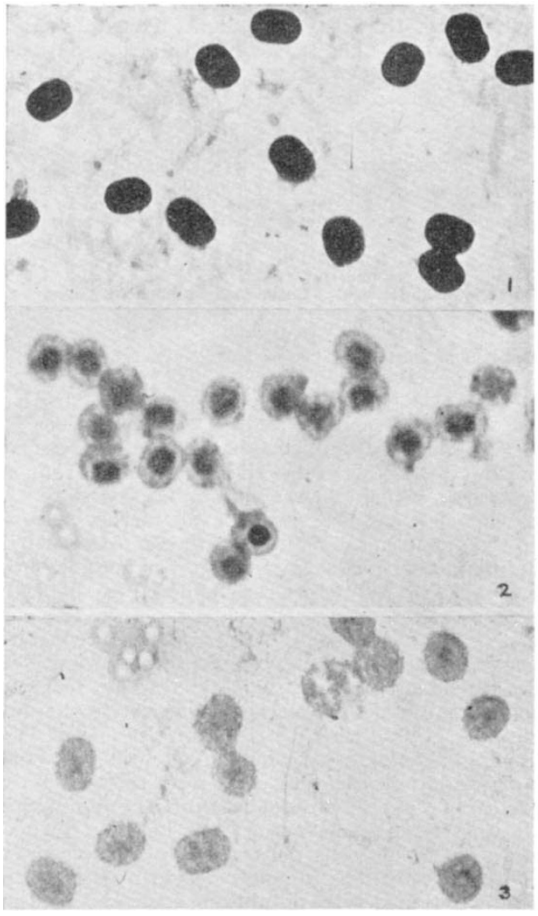

Fig. 1. *Molluscum contagiosum* elementary bodies, untreated. × 25,000

Fig. 2. As Fig. 1, after Chabaud fixation (15 min.) and treatment with crystalline pepsin (0·02 per cent, *p*H 2·0, 37° C., 2 hr.)

Fig. 3. As Fig. 2 after further treatment with crystalline deoxyribonuclease (0·1 per cent, *M*/15 phosphate buffer *p*H 6·0, 37° C., 30 min.) followed by a second pepsin treatment as above

Elementary bodies of *Molluscum contagiosum* taken from specific lesions by dabbing[9] (Fig. 1) were fixed in Chabaud solution and treated with crystallized pepsin at *p*H 2. As in other pox viruses, most of the elementary bodies were degraded and showed a more or less opaque central body of varying size and shape (Fig. 2). Earlier findings[1] that the central bodies of pepsin-treated virus particles become less opaque by treatment with deoxyribonuclease could not be confirmed, because of the variable density of these bodies. But when the deoxyribonuclease treatment was followed by a second pepsin treatment, the mass of the central body was hydrolysed, leaving an almost empty membrane (Fig. 3), thus showing that pepsin will not digest the proteins of the central body unless the protection afforded by deoxyribonucleic acid is rendered ineffective by the depolymerizing action of deoxyribonuclease; this finding was borne out by similar observations on deoxyribonucleoproteins of higher organisms (see ref. 10).

So far as the effect of these enzymes is concerned, there is obviously no dissimilarity between the central body of pox viruses and the nuclear structure of bacteria[7,8]. The virus membrane left after enzyme treatment resembles in many respects the empty wall of a bacterial cell.

A full report of this work will be published elsewhere[11]. Analogous results were obtained with vaccinia virus[12], in which we have studied the morphological variation of the central body (unpublished work).

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Isolation of *Keratinomyces ajelloi* from Soils in Great Britain

Karling[1] first used keratinaceous materials for the isolation of keratinophilic chytrids from soil and water. Similar techniques for the isolation of other keratinophilic fungi from soil have since been devised by other workers. Thus, Mandels *et al.*[2], Cooke[3] and Ajello[4] have also isolated *Microsporum gypseum* from various soil samples in the United States. Belgian soils examined by Vanbreuseghem[5] yielded no known dermatophytes, but did reveal the presence of a keratinophilic fungus which Vanbreuseghem placed